

The Evaluation of the Leading Hadronic Contribution to the Muon Anomalous Magnetic Moment

Monday 19 February 2018 - Friday 23 February 2018

**Mainz Institute for Theoretical Physics, Johannes Gutenberg University
Programme**

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Monday 19 February 2018

The muon g-2 and the MUonE project - 02.430 (09:00-14:45)

time	[id] title	presenter
09:00	Registration	
10:00	[2] Status of theoretical predictions of a_μ	KNECHT, Marc
10:40	[3] The muon g-2 and $\alpha(M_Z)$: the hadronic part	JEGERLEHNER, Fred
11:20	[4] Review of R-measurements	EIDELMAN, Simon
12:00	[5] The MUonE project	PASSERA, Massimo VENANZONI, Graziano
12:40	Lunch	
14:00	[6] Lattice results for $a_{\mu^{\text{HLO}}}$	KRSTIC MARINKOVIC, Marina

The MUonE experiment - 02.430 (14:45-16:15)

time	[id] title	presenter
14:45	[7] Results from Test Beam	PRINCIPE, Antonio VENANZONI, Graziano
15:30	[8] Simulation of Multiple Scattering in GEANT4	IVANTCHENKO, Vladimir

Tuesday 20 February 2018

QED NNLO: Amplitudes & Master Integrals - 02.430 (09:00-14:00)

time	[id] title	presenter
09:00	[9] On the decomposition of 2-loop μe scattering via Adaptive Integrand Decomposition	TORRES BOBADILLA, William
09:45	[10] Automated higher order corrections with GoSam	GREINER, Nicolas
10:30	Coffee break	
11:00	[11] Two-loop master integrals for μe -scattering in QED	PRIMO, Amedeo
11:45	[12] Building bases for analytical fits of four-loop master integrals	LAPORTA, Stefano
12:30	Lunch	

Monte Carlo: Theory - 02.430 (14:00-16:00)

time	[id] title	presenter
14:00	[13] Monte Carlo generators for flavour factories	CZYZ, Henryk
14:45	[14] μe at NLO, Calculations and Phenomenology, Towards a MC at NNLO	Dr. CARLONI CALAME, Carlo PICCININI, Fulvio ALACEVICH, Massimo

Wednesday 21 February 2018

QED NNLO: Amplitudes - 02.430 (09:00-11:00)

time	[id] title	presenter
09:00	[15] Calculations for muon decay at NNLO	SIGNER, Adrian ULRICH, Yannick
09:45	[16] Expansion by regions in mu-e scattering	BROGGIO, Alessandro
10:15	Coffee break	

The MUonE experiment: The MUonE experiment - 02.430 (11:00-17:30)

time	[id] title	presenter
11:00	[17] Review of M2 Beam at CERN	BERNHARD, Johannes
11:45	[18] Review of the experimental apparatus & systematic errors	MARCONI, Umberto
12:30	Lunch	
14:00	[19] PID at MUonE	Dr. IGNATOV, Fedor
14:45	[20] Silicon detectors: state of the art and possible options for MUonE	MERSI, Stefano
15:30	Coffee break	
16:00	[21] Tracking setup preparation for test beam 2018	BRIZZOLARI, Claudia
16:45	[22] Work plan for 2018	MATTEUZZI, Clara

Thursday 22 February 2018

The MUonE experiment: conclusion & outlook - 02.430 (09:00-11:15)

time	[id] title	presenter
09:00	[23] Conclusion & outlook of the experimental session	VENANZONI, Graziano
10:45	Coffee break	

Hadronic corrections & bound states - 02.430 (11:15-15:45)

time	[id] title	presenter
11:15	[24] Hadronic corrections at NNLO	FAEL, Matteo
12:00	[25] Hadronic corrections to $g-2$ via Schwinger's sum rule	Ms. HAGELSTEIN, Franziska
12:30	Lunch	
14:00	[26] Dispersive approach to QCD and its applications	NESTERENKO, Alexander
14:45	[27] Hadronic effects in muonium hyperfine structure	KARSHENBOIM, Savely
15:15	[28] Tests of QED with the bound electron g -factor	Dr. SZAFRON, Robert

Friday 23 February 2018

Closing and outlook - 02.430 (10:00-15:00)

time	[id] title	presenter
10:00	[29] Common document discussion, workshop closing and outlook	Prof. TRENTADUE, Luca
13:30	Lunch	